

spines before the dorsal and anal fins, and which, by virtue of this character, though in the case of the former the spines are not apparent externally, serve manifestly to re-conduct to the section to which *Lichia* belongs. The discovery of the present genus, therefore, furnishes a more completely connecting link between these two groups.

*Rhynchobdella* and *Mastacembelus* agree with *Paropsis*, both in wanting ventrals and in having the first dorsal represented by free spines; but the form of these two genera is so totally different in all other respects, that it is impossible they can be confounded with it.

This new genus is from the east coast of South America.

PAROPSIS SIGNATA. Jen.

PLATE XIII.

*P. argentea, nitens, summo dorso cærulescente; operculo ad angulum superiorem maculâ nigrâ signato; pinnis pectoralibus maculis duabus in axillis et ad radices radiorum, minoribus.*

B. 10; D. 5—1/33; A. 2—1/35; C. 17, et circa ½ accessar.; P. 21; V. 0.

LONG. unc. 9.

FORM.—Body very much compressed, of a rhomboidal form, the dorsal and ventral lines rising to an angle at the commencement of the dorsal and anal fins respectively. Head a laterally compressed cone: tail becoming suddenly attenuated before the setting on of the caudal fin, without any keel at the sides. Back sharp and elevated; the greatest depth contained not more than two and a half times in the entire length: thickness only one-fifth of the depth. The length and depth of the head are equal, each being half the depth of the body. The upper and under profile meet at the extremity of the snout at nearly a right angle, the former falling in a very regular curve from the commencement of the dorsal fin. Mouth moderately large, the commissure reaching to beneath the eye, with the lower jaw projecting and of considerable strength and thickness. In each jaw a single row of very fine sharp teeth. The tongue, which is of a triangular form, free at the tip, and pointed, is rough, with some extremely fine closely shorn velutine teeth: a small triangular patch of these last teeth on the front of the vomer, and a narrow row on each palatine: pharyngeans with rather stronger teeth. The intermaxillary is very slightly protractile. The maxillary reaches, when the mouth is closed, to a vertical from the posterior part of the orbit: it is very visible from without, having only its anterior portion concealed by the suborbital, and being much dilated at its posterior extremity, which is in shape somewhat securiform. Eyes above the middle of the cheek, and nearer the end of the snout than the posterior margin of the opercle; their diameter rather more than one-fifth the length of the head: the suborbital forms a narrow band beneath each. Nostrils half-way between the eyes and the end of the snout; the anterior orifice round; the posterior, which is the larger one, oval. Preopercle with the ascending margin nearly vertical; the angle at bottom rounded. The opercle and subopercle together present a rounded margin posteriorly,

though at the upper portion there are two small blunt points distinguishable by the finger, between which there is a very shallow notch: the line of separation between these two bones descends obliquely forwards to a little above the rounded angle of the preopercle, where it meets the line of the interopercle, which descends obliquely backwards: \* all the margins of the opercular pieces entire. Gill opening very large, the aperture reaching to beneath the anterior margin of the eye: the membranes, each of which has as many as ten rays, † cross a little over each other, and are not united to the isthmus.

Snout, jaws, and cheeks, as well as the several pieces of the gill-cover, without scales: ‡ body covered with extremely minute ones, of an oval form, longer than broad, marked with concentric circles, and entire on the margin. The lateral line is slightly arched above the pectoral, and its course a little undulating, but it descends gradually to near the middle of the body, whence it runs straight to the caudal.

The first dorsal is represented by five short free spines, each capable of separate motion, and each furnished with its own membrane; in advance of them is a somewhat smaller reclined spine with its point directed forwards: the first erect spine is above the middle of the pectoral, and distant from the end of the snout nearly one-third of the entire length. Beyond the five free spines, and immediately before the commencement of the second dorsal is another small spine closely pressed down, and almost concealed beneath the skin, pointing backwards. The second dorsal, which has also at its anterior edge a small spine one-third the length of the first soft ray, commences at the middle point of the entire length, caudal excluded. The general form of this fin is similar to that of the genus *Lichia*, long, with the anterior portion elevated; the greatest height about one-fourth of the depth, or hardly so much. The anal answers exactly to the second dorsal in form and extent, and is preceded by two free spines, separated from it by a small space, besides a longer one at its anterior edge. Caudal forked nearly to the base, where there are a number of minute scales; the lobes equal, pointed, and moderately elongated, each contained about four times and one-third in the entire length. Pectorals attached at about the middle of the depth, a little behind the opercle; of a somewhat triangular form, small, their length not much exceeding half that of the head. No trace of ventrals whatever.

COLOUR.—“Uniform bright silvery, the ridge of the back bluish: a black patch on the gill-cover, and another under the pectoral fin.”—D.—The first of the patches alluded to by Mr. Darwin is very conspicuous, and is situate at the upper angle of the opercle, immediately in advance of the commencement of the lateral line. The second may be described as consisting of two distinct spots; one at the root of the upper rays, and completely in the axilla; the other, a small one of an elongated form, immediately beneath the lowest ray, and partly visible without raising the fin. The elevated portion of the second dorsal is also dusky, and a faint edging of this colour runs for a short way along the margin of this fin. The anal is pale.

Habitat, Northern coast of Patagonia.

\* This part is exactly as described by Cuvier and Valenciennes in the *Lichia Amia*, to which genus the present one is so nearly allied.

† *Lichia Amia* is represented as having nine; and this forms another mark of affinity between the two genera.

‡ There are scales on the cheeks in *Lichia*, according to Cuvier and Valenciennes, but I see no appearance of them in this genus.